was often greeted by 'overflow' errors. After some researching, the problem could be narrowed down to my version of Microsoft Data Access Components (MDAC). Fortunately, Microsoft have a hotfix available, see Q329414 on microsoft.com: support.microsoft/com/default.aspx?scid=kb;en-us;Q329414. The EIT will run fine and no overflow errors pop up if you use MDAC version 2.7.

Reading AT micros

Dear Editor — triggered by your articles I've just started experiments with Atmel microcontrollers. Is it possible to read code from these devices? Programming is no problem for me. I am using the Elektor 89S8252 Flash Micro board. Do I have to use a separate programmer for each controller type?
M. Verwoord

The AT89S8252 can be read out only if the security bits are not programmed. The software we supply is however unable to read the controller contents. To do this, you need a dedicated reader, for example, B. Kainka's 'atmelips.zip', which may be found at http://b.kainka.bei.t-online.de/basismi.htm (scroll to bottom of page). Our Multi Programmer on USB (June 2004) handles many different microcontrollers including the 89S8252.

IDE disk on USB

Dear Editor — what do you think of this suggestion: a USB2.0 interface for a portable hard disk! Now that looks like the perfect project for Elektor readers as I'm sure many will have old IDE hard drives lying around. As I see it, such an interface should not be too hard to design and dedicated chips are probably available.
(a subscriber)

You may have missed that this type of interface is now widely available from computer shops at prices that defeat any attempt at home construction. As to cost, the interface circuit would probably match the value of the old hard disk and conversely it would be just as expensive as a new external USB hard disk. Consequently, such interfaces are typically bought by people regretting to part with dear old hardware.

NiCd batteries — environment vs. quick profits

Dear Editor — today's rechargeable batteries are vastly superior to the old Nickel-Cadmium units of 30-odd years ago. They have several times the charge density, don't suffer the memory problems, and don't contain highly toxic cadmium. Why, then, do so many products still come to market with NiCd cells in them? What possible advantage do they offer to manufacturer or consumer?
Second question: since NiMH cells have the same voltage and at least twice as much current capacity as Ni-Cd, is it safe to replace Ni-Cd cell packs with NiMH units of similar voltage and size? I'd love to extend the life of my cordless screwdriver, phone, shaver, etc.
George Price, Atlanta, Georgia

NiCd batteries still proliferate (also in new consumer electronics) due to commercial forces. You may have missed that over the past few years the NiCd production process has matured to the extent that impressive capacity (exceeding 2 Ah for AA cells) can be achieved at very low cost. The production of NiCd batteries will be banned soon but considering the vast production capacity (and stocks) of Far Eastern and Chinese battery manufacturers we fear NiCd technology will be around for quite a few years to come.
You cannot charge a NiMH cell with a NiCd charger unless it has an adapted end-of-charge detector. See also the article 'ABC of Rechargeable Batteries' in this issue.

Radio articles resource on the web

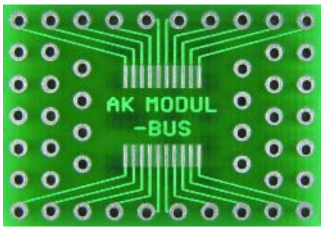
Good morning Jan, it is many years since we last spoke and I submitted articles to Elektor. I hope that you are well. I have recently set up my own business. One element of this is a website that I have run for a number of years. I have recently given it a major overhaul and I am re-launching it. Its aim is to be a resource of free information, articles and data about radio and electronics. The URL is www.radio-electronics.com
Ian Poole

Thanks Ian, the word is being passed on.

I-see adapters

Dear Sir — for those of us that are older who enjoy electronics as a hobby and want to use the smaller format of integrated circuit packages.
I am sure that there many of us who would like to obtain adapter PCBs to convert from ssop to dip, soic to dip, etc., to include the any pins used. Would you consider making available through your PCB Service a selection of the different small packages to DIP 8 pin to 28 pin?
I have noticed in RadioSpares these cost about £5.00 each.
If you know a source for these useful parts I would appreciate their address.
E. Lea

Thanks for the suggestion which has been copied into our design department. Meanwhile, for ICs in TSSOP or SSOP cases with up to 20 pins have a look at the adapter board sold by AK MODUL BUS, www.ak-modul-bus.de



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